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Bohl, Sr.

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(54) **ROLLING APPARATUS TO ASSEMBLE A CIGARETTE WITH ENHANCED EFFICIENCY**

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(51) **Int. Cl.**

A24C 5/10	(2006.01)
A24C 5/46	(2006.01)
A24C 5/40	(2006.01)

(52) **U.S. Cl.**
CPC ***A24C 5/465*** (2013.01); ***A24C 5/40*** (2013.01)

(58) **Field of Classification Search**
None
See application file for complete search history.

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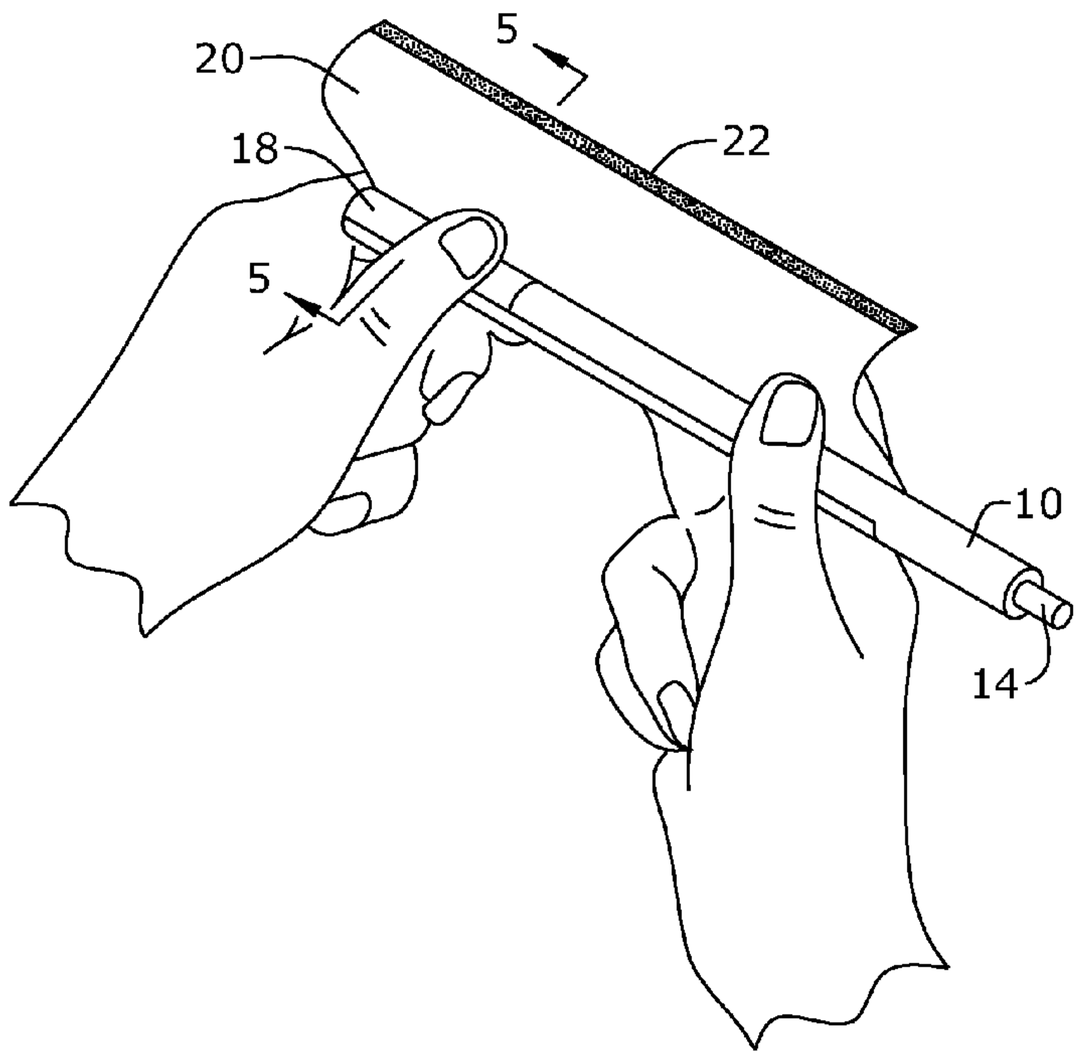
(57) **ABSTRACT**

A rolling apparatus for use in rolling a cigarette that includes a rolled outer tubular member able to store a smoking material and a rolled filter member disposed within proximate an end of the tubular member. The rolling apparatus includes a cylindrical member, and a pair of elongated members coupled to a first end of the cylindrical member, the elongated members positioned substantially parallel to each other and separated by a distance to create a slot between the elongated members. The elongated members receive a filter sheet that is disposed through the slot and around the elongated members to permit a user to wrap the filter sheet around the elongated members to create the rolled filter member. The apparatus receives an outer sheet to permit the user to wrap the outer sheet around the cylindrical member and the rolled filter member to create the rolled outer tubular member.

5 Claims, 4 Drawing Sheets



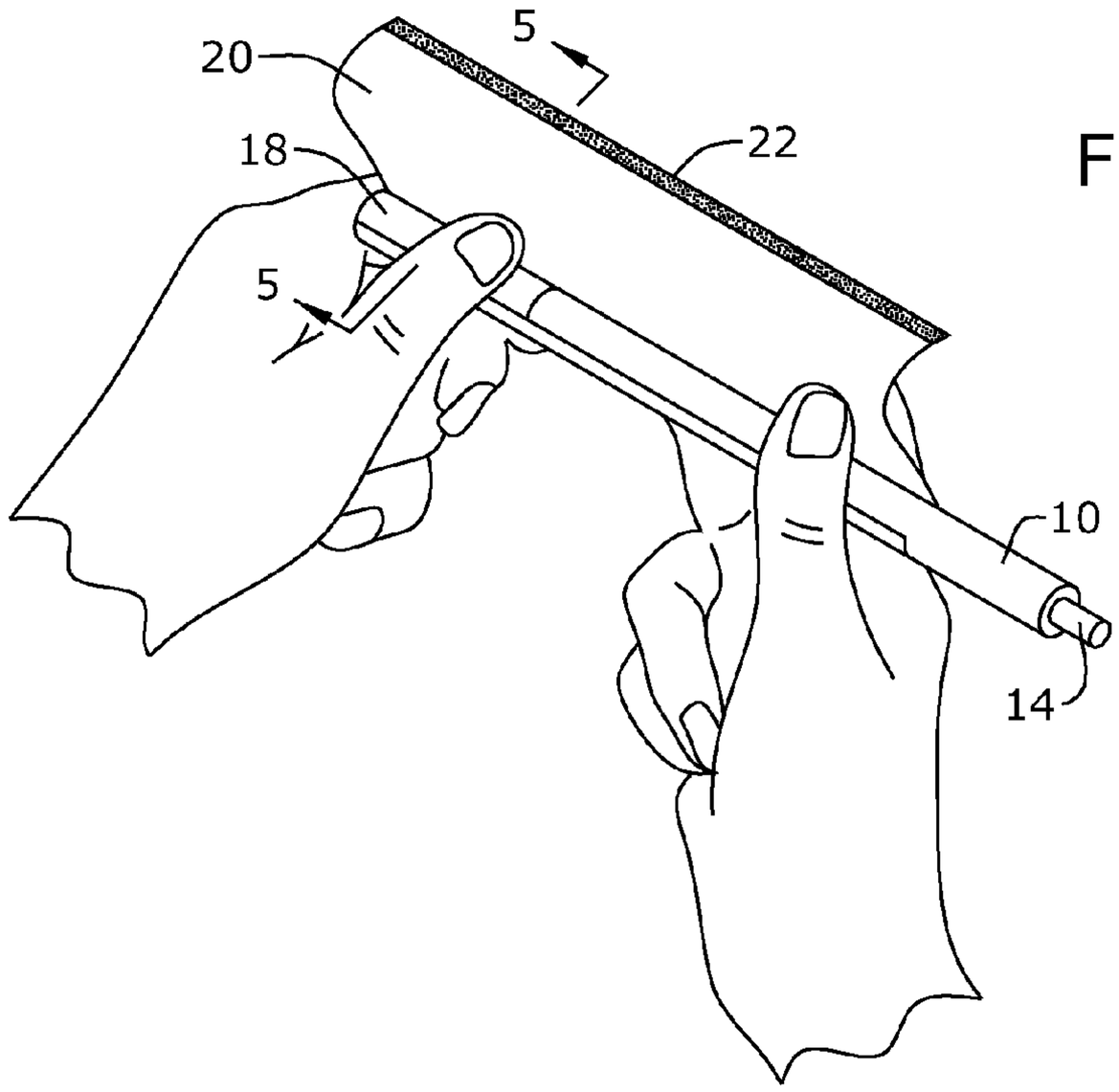


FIG.1

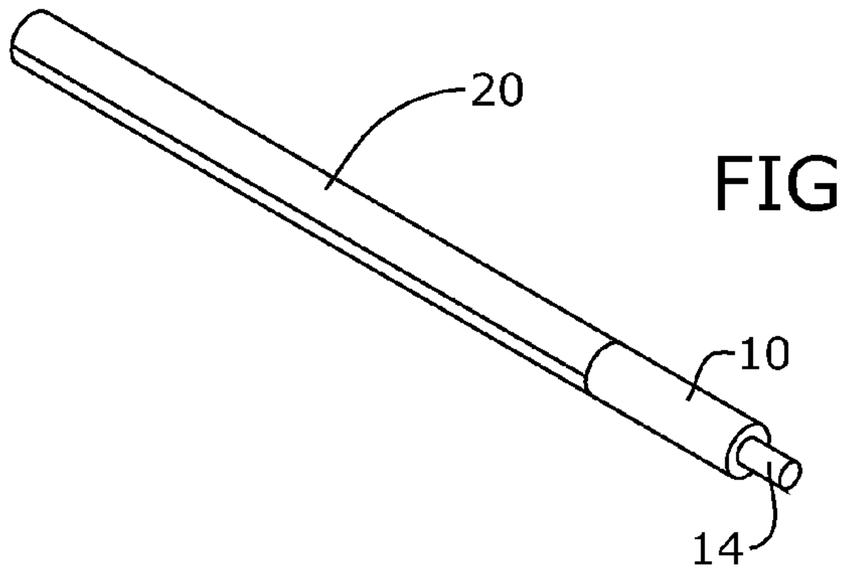


FIG.2

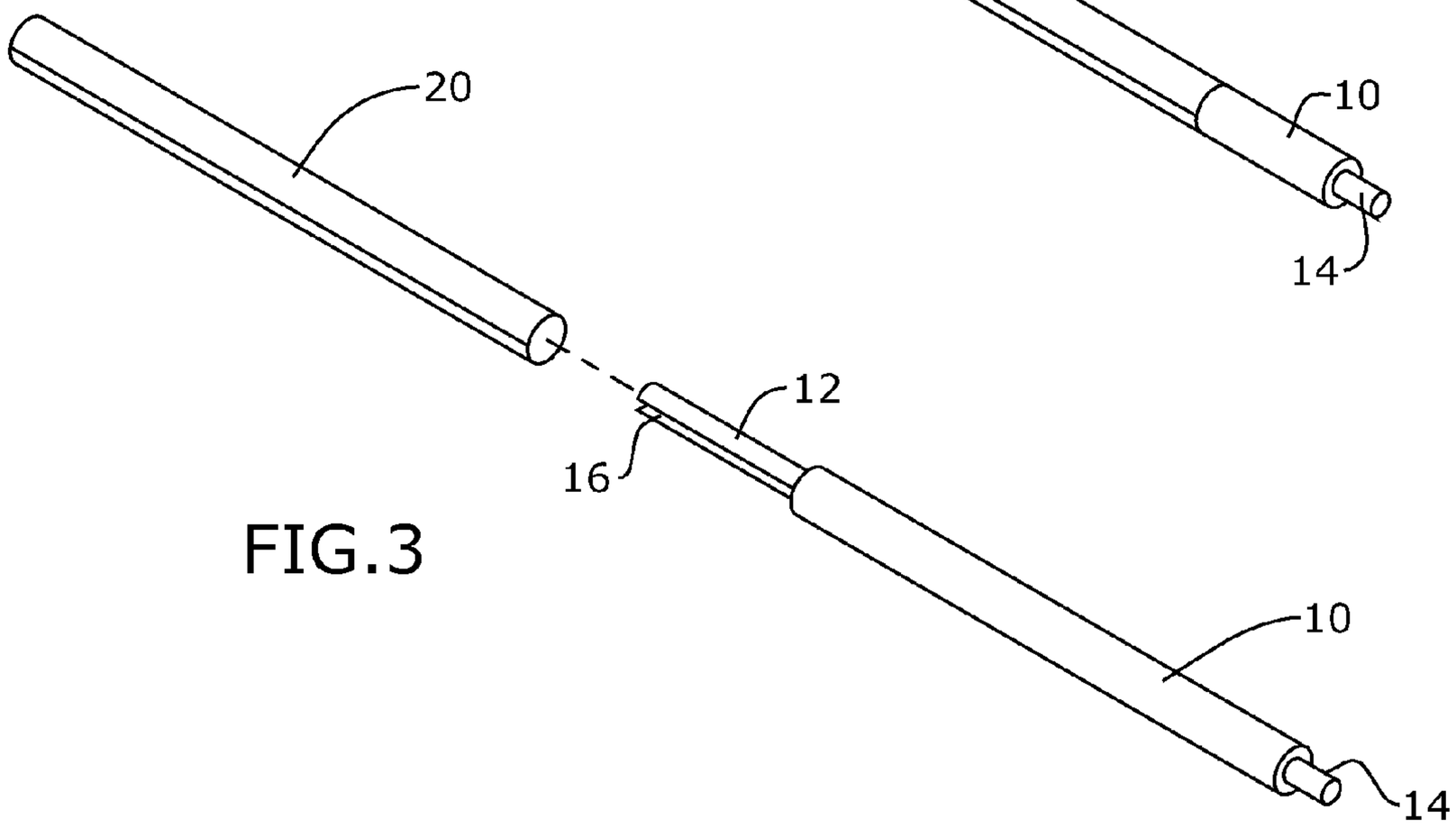


FIG.3

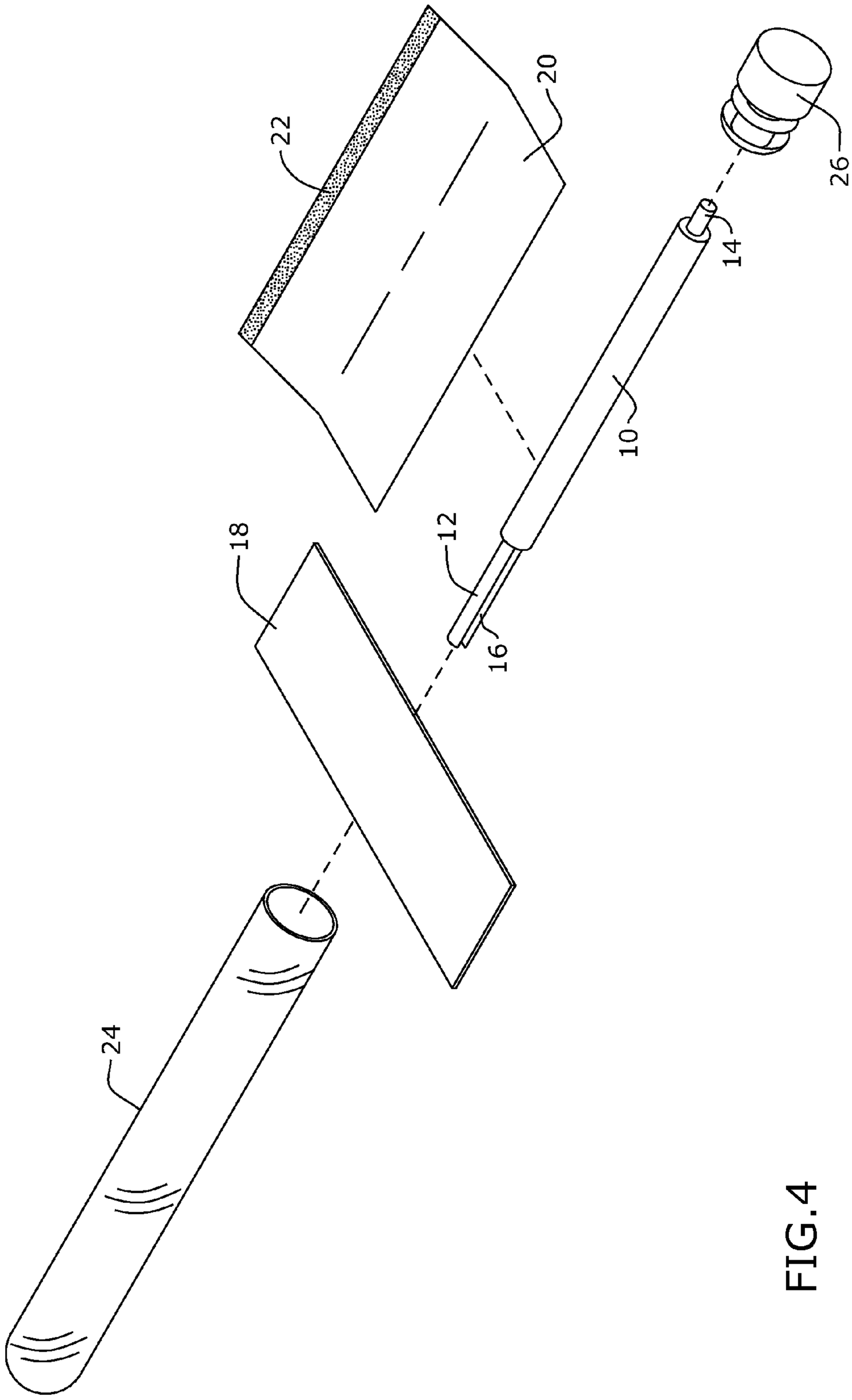
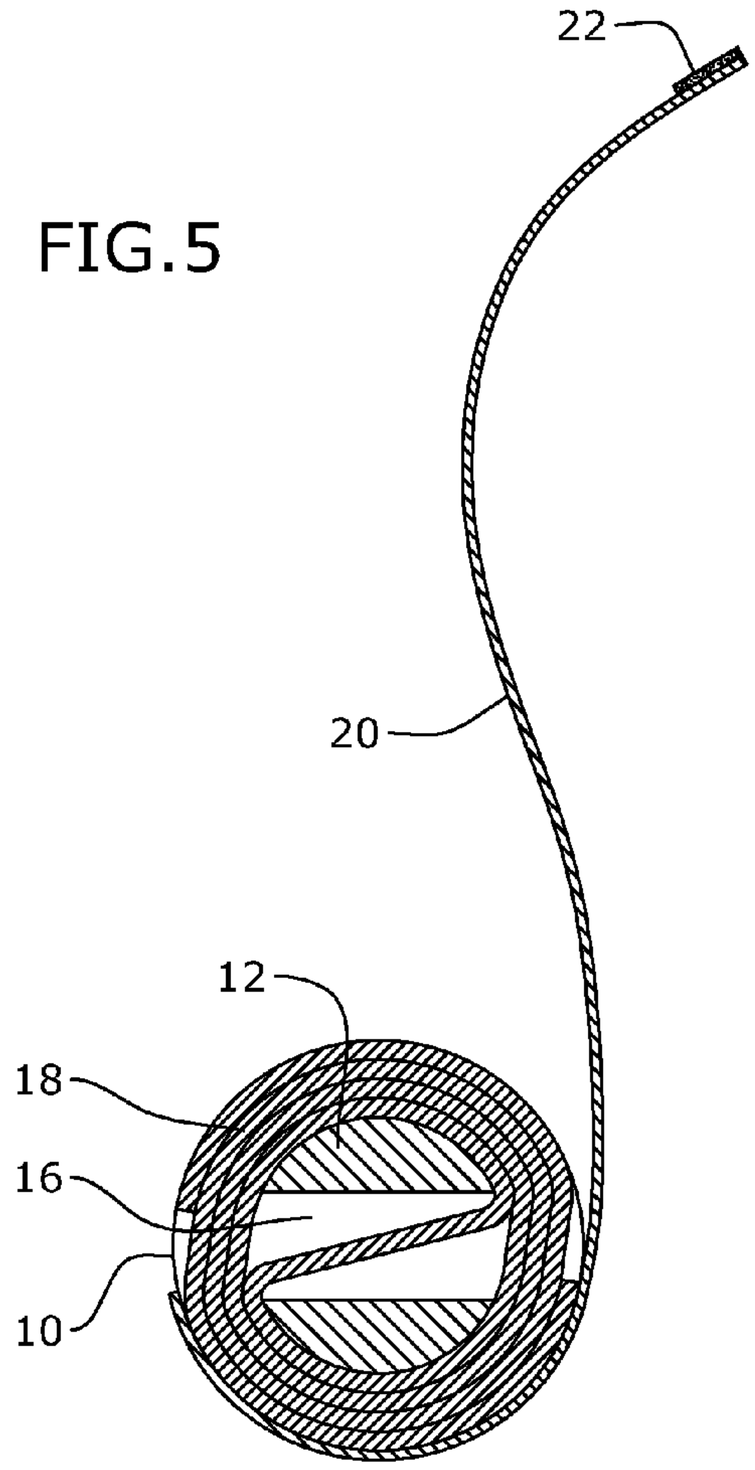


FIG.4

FIG.5



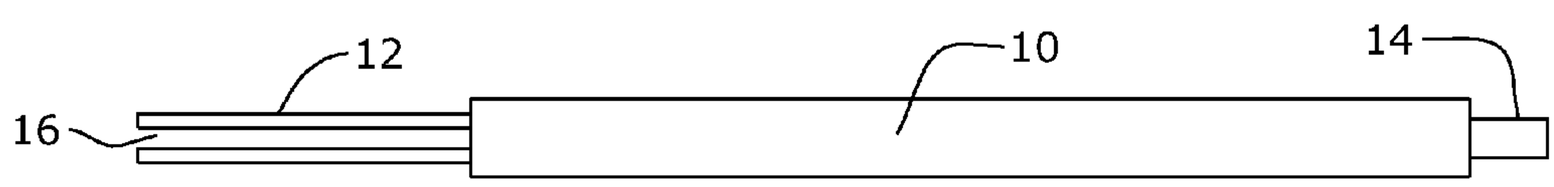


FIG.6

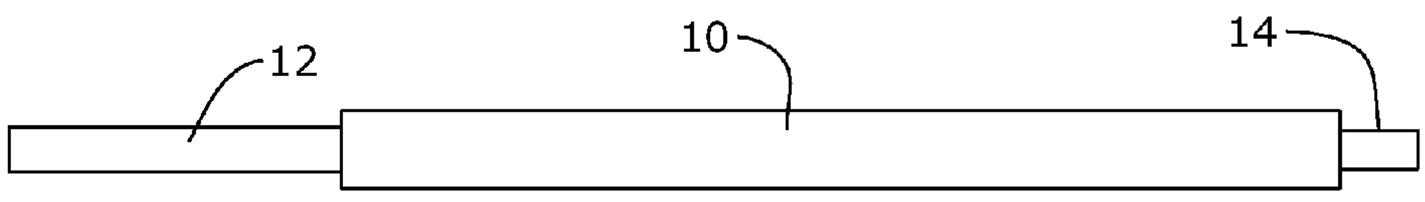
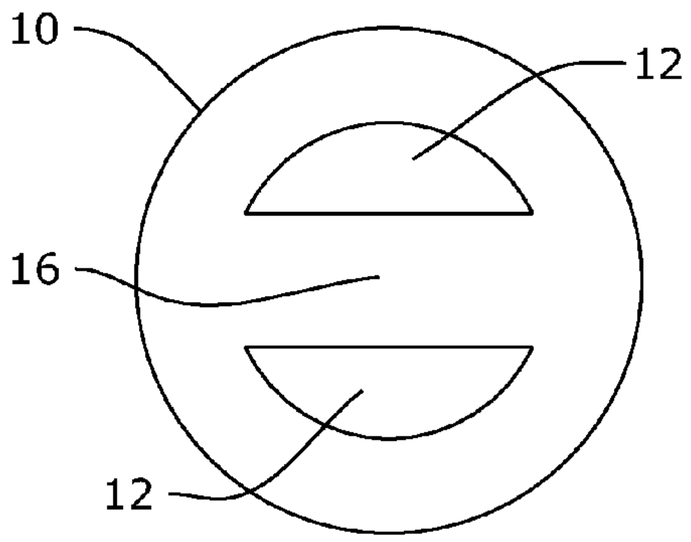


FIG.7

FIG.8



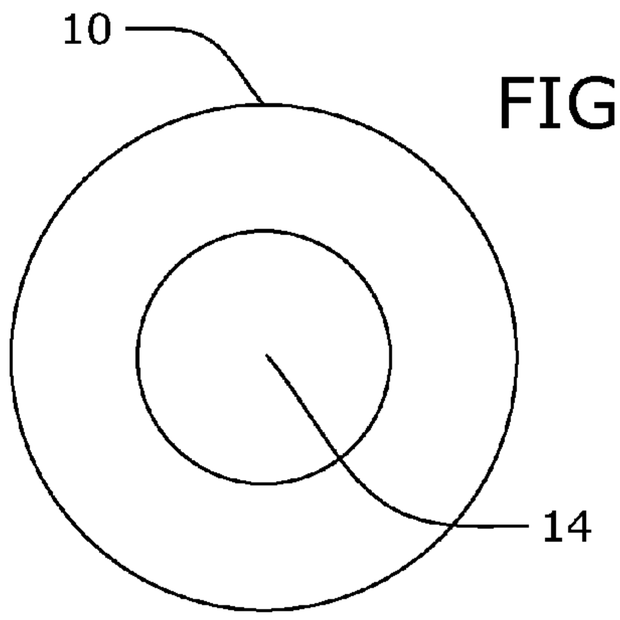


FIG.9

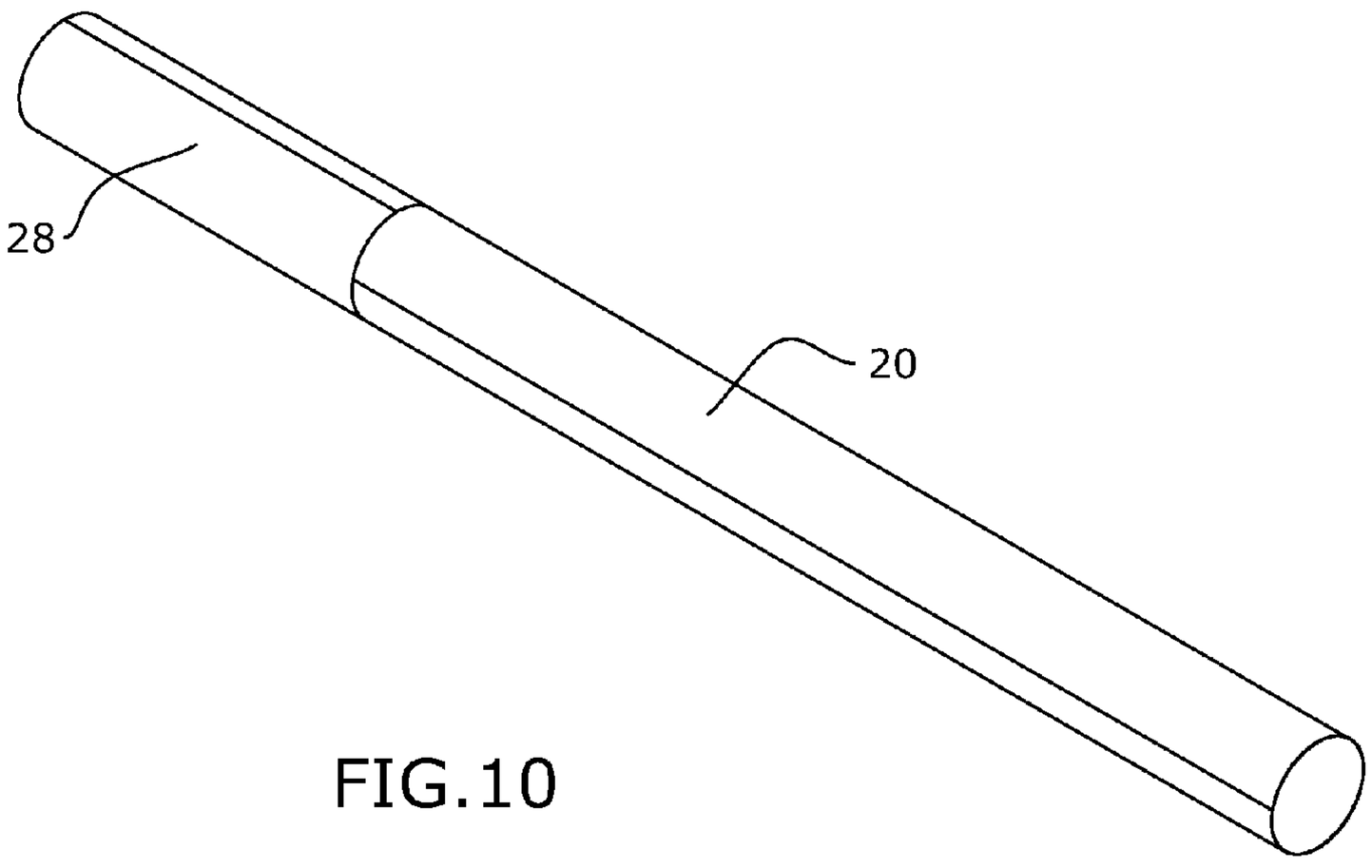


FIG.10

ROLLING APPARATUS TO ASSEMBLE A CIGARETTE WITH ENHANCED EFFICIENCY

RELATED APPLICATION

The application claims priority to provisional patent application U.S. Ser. No. 62/036,191 filed on Aug. 12, 2014, the entire contents of which is herein incorporated by reference.

BACKGROUND

The embodiments herein relate generally to cigarettes for use with herbal products or tobacco.

Individuals often roll their own cigarettes to smoke tobacco or herbs. Rolling paper is rolled into a tubular member to store the smoking material. A filter may be rolled and/or folded and placed within an end of the tubular member. The tubular member is filled with the smoking material to finish the cigarette. The advantages of rolling cigarettes at home instead of purchasing pre-made products allow users to customize the cigarette to better suit their needs and reduce overall costs.

As disclosed in U.S. Pat. No. 5,657,773, the process of rolling cigarettes by hand is difficult and requires patience, steady hands and dexterity. Individuals who are handicapped or suffer from ailments such as arthritis may not be able to perform these tasks. In addition, the process of rolling paper and/or filters manually by hand is time consuming and likely to result in cigarettes that are untidy and/or asymmetric, which detracts from the smoking experience and/or renders the cigarettes unusable.

As such, there is a need in the industry for a rolling apparatus that addresses the limitations of the prior art, which permits a user to assemble a higher quality rolled cigarette with enhanced efficiency.

SUMMARY

A rolling apparatus for use in rolling a cigarette with enhanced efficiency is provided. The cigarette comprises a rolled outer tubular member configured to store a smoking material therein and a rolled filter member disposed within the tubular member and positioned proximate an end of the tubular member. The rolling apparatus comprises a cylindrical member comprising a first end and a second end, and a pair of elongated members mechanically coupled to the first end of the cylindrical member, the pair of elongated members positioned substantially parallel to each other and separated by a distance to create a slot between the elongated members, wherein the pair of elongated members are configured to receive a filter sheet that is disposed through the slot and around the elongated members to permit a user to wrap the filter sheet around the elongated members to create the rolled filter member, wherein the apparatus is configured to receive an outer sheet to permit the user to wrap the outer sheet around the cylindrical member and the rolled filter member to create the rolled outer tubular member. In certain embodiments of the invention, each elongated member in the pair of elongated members comprises a generally semi-circular cross-section.

BRIEF DESCRIPTION OF THE FIGURES

The detailed description of some embodiments of the invention will be made below with reference to the accompanying figures, wherein the figures disclose one or more embodiments of the present invention.

FIG. **1** depicts a perspective view of certain embodiments of the rolling apparatus shown in use;

FIG. **2** depicts a perspective view of certain embodiments of the rolling apparatus illustrating a rolled cigarette;

FIG. **3** depicts a perspective view of certain embodiments of the rolling apparatus illustrating the removal of the apparatus from the rolled cigarette;

FIG. **4** depicts an exploded view of certain embodiments of the rolling apparatus;

FIG. **5** depicts a section view of certain embodiments of the rolling apparatus taken along line **5-5** in FIG. **1**;

FIG. **6** depicts a front view of certain embodiments of the rolling apparatus;

FIG. **7** depicts a top view of certain embodiments of the rolling apparatus;

FIG. **8** depicts a left side view of certain embodiments of the rolling apparatus;

FIG. **9** depicts a right side view of certain embodiments of the rolling apparatus; and

FIG. **10** depicts a perspective view of certain embodiments of the rolling apparatus illustrating an alternative embodiment of a rolled cigarette.

DETAILED DESCRIPTION OF CERTAIN EMBODIMENTS

As depicted in FIGS. **1-4**, rolling apparatus **10** is configured to assemble a cigarette with crutch **18** and rolling paper **20**. Crutch **18** is a filter sheet that is wrapped around rolling apparatus **10** to form a filter member for the cigarette. The filter sheet may be made from various materials known in the field including, but not limited to, hemp paper, other types of paper fiber, cardstock, or the like. Rolling paper **20** is a generally rectangular sheet made from any material or combination of materials known in the field such as hemp paper, other types of paper, cellophane, or the like. Rolling paper **20** comprises gum edge **22**, which is an adhesive used to secure the edge of the paper to itself. Rolling paper **20** is wrapped around rolling apparatus **10** and crutch **18** to form the outer tubular structure of a cigarette. It shall be appreciated that the interior of the outer tubular structure may be filled with any smoking material such as herbs or tobacco.

As depicted in FIGS. **4** and **6-7**, rolling apparatus **10** comprises a base cylindrical member, a pair of elongated members **12** and tapping end **14**. Elongated members **12** are coupled to a first end of the base cylindrical member and oriented substantially parallel to each other. In a preferred embodiment, elongated members **12** are separated by a distance to create slot **16** as depicted in FIG. **8**. The distance between elongated members **12** is preferably 2.1 millimeters. However, this distance may vary. Tapping end **14** is a cylindrical member coupled to the second end of the base cylindrical member as depicted in FIG. **9**. In one embodiment, the length of rolling apparatus **10** is approximately 144 millimeters. However, the dimensions of rolling apparatus **10** may vary.

In certain embodiments, rolling apparatus **10** comprises a storage apparatus comprising non-rattle tube **24** and non-rattle end cap **26**. Non-rattle tube **24** comprises an opening sufficiently large to receive rolling apparatus **10**. Non-rattle end cap **26** can be secured to non-rattle tube **24** to completely enclose rolling apparatus **10**. Non-rattle end cap **26** can be attached or detached from non-rattle tube **24** as many times as desired. It shall be appreciated that rolling apparatus

10 may be made from any materials known in the field including, but not limited to, aluminum, other metals, plastic, wood, or the like.

In operation, rolling apparatus **10** is used to assemble a rolled cigarette. Crutch **18** is positioned such that the filter sheet is disposed within slot **16** between elongated members **12** of rolling apparatus **10** as shown in FIG. **5**. A user rotates rolling apparatus **10** to wrap the filter sheet around elongated members **12** to complete the assembled crutch **18**. Depending on how the filter sheet is oriented within slot **16** and wrapped around elongated members **12**, different shaped crutches **18** may be formed including, but not limited to, S-shape, M-shape, P-shape, I-shape, twisted flower and alternative shaped crutches. Rolling paper **20** is disposed around rolling apparatus **10**. The user rotates rolling apparatus **10** to wrap rolling paper **20** around the base cylindrical member and crutch **18** to form the cigarette's structure. After rolling paper **20** is completely wrapped to form an outer tubular member, gum edge **22** is moistened to activate the adhesive to permit the edge of rolling paper **20** to be secured to itself. Rolling apparatus **10** is removed from rolling paper **20** and crutch **18**.

To complete the cigarette, any type of smoking material (not shown) such as herbs or tobacco is disposed within the rolled rolling paper. It shall be appreciated that rolling apparatus **10** assembles rolled cigarettes that can be used with any cigarette filling devices (not shown) known in the field. Once the smoking material is disposed within rolled rolling paper **20**, a user can insert tapping end **14** of rolling apparatus **10** into the end of rolled rolling paper **22** opposite the end where crutch **18** is located. This permits tapping end **14** to push the smoking material further into the rolled rolling paper **20** to permit a user to close/seal the end of the cigarette.

In an alternative embodiment, a user may secure crutch cover **28** around the exterior of rolling paper **20** above crutch **18** as shown in FIG. **10**. Crutch cover **28** is a sheet made from any material known in the field to enhance the aesthetics of the assembled cigarette. Crutch cover **28** may comprise any words, designs or logos to serve for promotional purposes. It shall be appreciated that a user may use rolling apparatus **10** as a tool to help wrap crutch cover **28** around rolling paper **20**.

It shall be appreciated that the components of rolling apparatus **10** described in several embodiments herein may comprise any alternative known materials in the field and be of any color, size and/or dimensions. It shall be appreciated that the components of rolling apparatus **10** described herein may be manufactured and assembled using any known techniques in the field.

Persons of ordinary skill in the art may appreciate that numerous design configurations may be possible to enjoy the functional benefits of the inventive systems. Thus, given the wide variety of configurations and arrangements of embodiments of the present invention the scope of the invention is reflected by the breadth of the claims below rather than narrowed by the embodiments described above.

What is claimed is:

1. A rolling apparatus for use in rolling a cigarette with enhanced efficiency, the cigarette comprising a rolled outer tubular member configured to store a smoking material therein and a rolled filter member disposed within the tubular member and positioned proximate an end of the tubular member, the rolling apparatus comprising:

a cylindrical member comprising a first end, a second end opposite the first end, and a cross-section oriented generally perpendicular to a longitudinal axis of the cylindrical member, the cross-section extending from the first end to the second end with a generally constant diameter; and

a pair of elongated members mechanically coupled to a central portion of the first end of the cylindrical member to create unobstructed space on a surface along a perimeter of the first end of the cylindrical member, the pair of elongated members positioned substantially parallel to each other and separated by a distance of approximately 2.1 millimeters to create a slot between the elongated members;

wherein the pair of elongated members are configured to receive a filter sheet that is disposed through the slot and around the elongated members to permit a user to wrap the filter sheet around the elongated members to create the rolled filter member, wherein the apparatus is configured to receive an outer sheet to permit the user to wrap the outer sheet around the cylindrical member and the rolled filter member to create the rolled outer tubular member.

2. The rolling apparatus of claim **1**, wherein each elongated member in the pair of elongated members comprises a generally semi-circular cross-section with a curved outer surface connected to a flat outer surface, wherein the flat outer surfaces of the elongated members face toward each other and the curved outer surfaces of the elongated members face away from each other.

3. The rolling apparatus of claim **2**, further comprising a cylindrical end member mechanically coupled to the second end of the cylindrical member, wherein a first cross-sectional diameter of the cylindrical member is greater than a second cross-sectional diameter of the cylindrical end member.

4. The rolling apparatus of claim **3**, further comprising a tubular housing member comprising a closed end and an open end opposite the closed end, wherein the tubular housing member is configured to receive the cylindrical member, elongated members and cylindrical end member through the open end.

5. The rolling apparatus of claim **4**, further comprising a cap detachably coupled to the open end of the tubular housing member.

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